

A

<p>2002-541092/58 A85 L03 SANKYO KASEI KK 2000.09.18 2000-281398(+2000JP-281398) (2002.03.29) H05K 3/18, C23C 18/28, 18/31, H05K 3/38, 3/00 Manufacture of molded circuit component used as connector for interface, involves forming resin mask on base material, providing catalyst to roughened material surface, and forming conductive layer on catalyst surface C2002-153572</p>	<p>SANB 2000.09.18 *JP 2002094218-A A(5-F1E2, 11-C4D, 12-E7) L(3-H3, 3-H4E1)</p>
<p><u>NOVELTY</u> The dielectric base material (1) of predetermined form is formed by synthetic resin. Surface (1a) portion of base material, is exposed. A resin mask (2) of polyamide group polymer is provided on base material and roughened. A catalyst is provided to roughened surface (1b). Subsequently, mask is removed from base material, and a conductive layer (4) of preset pattern is formed on catalyst surface (3).</p> <p><u>DETAILED DESCRIPTION</u> The dielectric base material (1) of predetermined form is formed by synthetic resin material. The surface (1a) portion of the base material on which conductive layer (4) of predetermined form to be formed, is exposed. Subsequently, a resin mask (2) of polyamide</p>	<p>group polymer for covering base material, is provided such that the exposed portion of the base material is covered. The surface of the base material exposed from the resin mask is roughened. A catalyst is provided to the roughened surface (1b), by non-electrolytic plating. Subsequently, the resin mask is removed from the base material by formic acid, benzyl alcohol or metacresol, and the conductive layer of predetermined pattern is formed on the surface (3) on which the catalyst is provided.</p> <p><u>USE</u> For manufacture of molded circuit component such three-dimensional circuit substrates, especially built-in antennae of mobile telephone and connector for interface.</p> <p><u>ADVANTAGE</u> Since the resin is formed from the polyamide group polymeric material, the conductive layer is formed as design and as a reliable product. Since the resin mask is formed before roughening, the surface of the coating material is made hydrophobic, and hence stain</p> <p>JP 2002094218-A+</p>

of product and adherence of water content are prevented.

### DESCRIPTION OF DRAWING

The figure shows the sectional drawing of manufacturing process of molded circuit component.

Dielectric base material 1

Surfaces 1a,3

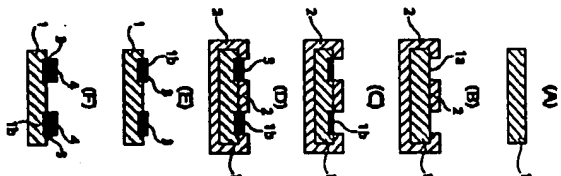
Roughened surface 1b

Resin mask 2

Conductive layer 4

### TECHNOLOGY FOCUS

Polymers - Preferred Polymer: The dielectric base material is liquid crystal polymer (LCP) chosen from polyester group resin, polybutylene terephthalate (PBT) and polyethylene terephthalate (PET). The base material surface is roughened using caustic potash or caustic soda.



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